



THE UNITED STATES PATENT AND TRADEMARK OFFICE

Attorney Docket No. 03841/0104

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In re Patent Application of

Robert W. KILLICK et al.

Serial No. 09/831,301

Group Art Unit: 1616

Filed: May 8, 2001

Examiner: A. Pryor

Ref
4-8-02

For: ADJUVANT COMPOSITION FOR CHEMICALS USED IN AGRICULTURE

**REPLY AND AMENDMENT
UNDER 37 C.F.R. §1.111**

Commissioner for Patents
Washington, D.C. 20231

Sir:

In reply to the Office Action mailed January 2, 2002, please reconsider the claims in view of the following remarks.

REMARKS

Applicants have carefully reviewed the Office Action of January 2, 2002. The present reply is intended to be fully responsive to all points of rejection raised by the Examiner and is believed to place the application in condition for allowance. Favorable reconsideration and allowance of the application are respectfully requested.

Status of the Claims

Claims 1-30 and 32-45 are pending in this application. Applicants appreciate the Examiner's indication that claim 33 is allowable.

Claim Rejections based on 35 U.S.C. § 103(a)

The Examiner has maintained the rejection of claims 1-4, 11, 15, 16, 18-20, 22, 24, 27-30, 32, 39 and 40 under 35 U.S.C. § 103(a) as allegedly unpatentable over

Saphakkul (U.S. Patent No. 4,964,874, hereafter "Saphakkul") and JP 59023898 (abstract). Applicants respectfully traverse.

The present invention is directed to homogeneous liquid adjuvant used in agriculture which comprises a lipophilic solvent, a lipophobic plant nutrient and a cationic emulsifier wherein the cationic emulsifier acts as a coupling agent between the lipophilic solvent and the lipophobic plant nutrient to form a homogeneous liquid composition.

Saphakkul teaches a hair dye composition containing a fatty alcohol, a cationic surfactant, two dyes (see column 4, lines 6-14) in an aqueous composition. The cationic surfactant provides a conditioning effect as well as the avoidance of the need for gloves during the hair dyeing process. There is no discussion of or suggestion that the cationic surfactant would be useful for assisting with providing a homogeneous composition comprising a lipophilic solvent and a lipophobic plant nutrient such as ammonium sulfate. There is no discussion at all in Saphakkul of the importance of solubility of the recited components of the composition.

JP 58023898 discloses a composition containing ammonium chloride and at least 50% water. Since the composition is water based (lipophobic) and ammonium chloride sulfate is soluble in predominantly aqueous solutions (lipophobic) there are no issues with solubility in this composition. Thus, there is no suggestion in JP 58023898 that ammonium sulfate could be used in a homogeneous composition containing a lipophilic solvent nor how to achieve such a homogeneous composition. There is no discussion at all in JP 58023898 of the importance of solubility of the recited components of the composition.

Since neither reference discloses forming a homogeneous mixture of lipophilic and lipophobic substances, the present invention cannot be rendered obvious by the cited prior art. Therefore, it would not have been obvious to one of ordinary skill in the art to combine Saphakkul and JP 58230898, each relating to aqueous solutions, to solve the solubility problem in lipophilic solvents that the present invention solves.

In reply to Applicants' response filed October 25, 2001, the Examiner states that there is allegedly "ample motivation for the combination since both reference

individually teach hair treatment compositions” and cites to In re Kerkhoven, 626 F.2d 846, 205 U.S.P.Q. 1069 (C.C.P.A. 1980) for the proposition that “[i]t is *prima facie* obvious to combine two compositions each of which is taught by the prior art to be useful for the same purpose, in order to form a third composition which is useful for the very same purpose.” Kerkhoven at 850. Applicants disagree with the Examiner’s position.

It is respectfully submitted that the Examiner’s reliance on Kerkhoven is misplaced since the cited prior art references are not useful for the same purpose themselves. Specifically, Saphakkul is directed to a hair dye composition and JP 58023898 is directed to a shampoo composition with no mention of any hair dyeing agents. Thus, the cited references are not “useful for the same purpose” and hence their combination would not result in a composition, which is useful for the “very same purpose.”

Thus, motivation to combine the teachings of Saphakkul and JP 58023898 is lacking and hence, the Examiner could only have found motivation to combine the references by using Applicants’ claimed invention as a blueprint.

Next, the Examiner avers that Applicants’ argument relating to the fact that the cationic emulsifier acts as a coupling agent between the lipophilic solvent and the lipophobic plant nutrient to form a homogeneous liquid composition has no patentable significance since the Examiner views this feature as “an intended used [sic] or function of the composition’s component.” The Examiner suggests that the claims be amended to recite that “the lipophilic solvent and the lipophobic plant nutrient are coupled by the cationic emulsifier.”

It is respectfully submitted that the claims as currently drafted already recite this feature. Specifically, each of the claims recites, “wherein the cationic emulsifier acts as a coupling agent between the lipophilic solvent and the lipophobic plant nutrient to form a homogeneous liquid composition.” Thus, this limitation is already present in the claims.

It is pointed out that the present invention is directed to the ability to form a homogeneous composition which contains a lipophilic solvent and a lipophobic plant nutrient. Until the invention claimed herein, lipophobic plant nutrients have only been formulated into aqueous solutions. It was the present Applicants who discovered that the use of a cationic

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emulsifier can be used to form a homogeneous composition of the plant nutrient and the lipophilic solvent.

Conclusion

For the foregoing reasons, the rejections should be withdrawn, and claims 1-30 and 32-45 should be allowed. Early and favorable action in that regard is earnestly solicited.

Should the Examiner have any questions concerning this Amendment, or wish to discuss any other issues in an effort to advance the prosecution of this application to issue, the Examiner is requested to contact the undersigned at the telephone number below.

Respectfully submitted,

April 2, 2002
Date

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